



BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Subsidiary Diploma in Construction and the Built Environment Pearson BTEC International Level 3 Foundation Diploma in Construction and the Built Environment Pearson BTEC International Level 3 Diploma in Civil Engineering Pearson BTEC International Level 3 Extended Diploma in Civil Engineering
Unit number and title	Unit 10: Surveying in Construction
Learning aim(s) (For NQF only)	Learning A: Understand the methods and technologies that underpin surveys
Assignment title	Reporting on the methods and technologies used in surveying
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are employed as an apprentice surveyor with a medium sized construction company. The company is involved in a range work that requires different surveying methods and techniques to be used. The senior engineer has asked you to research the different methods and techniques the company uses such as linear, levelling and angular measurement surveys. Each method of surveying requires specific equipment. The manager would like you to become familiar with each method by researching the equipment needed for each, the techniques needed to use each, when each method should be used, the information that is recorded for each and consider sources of errors and alternative methods of recording information. You will use your research to produce a report.
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Task 1	You have been asked to scrutinize the methods and technologies underpinning linear, levelling and angular measurement and surveys. To do this: • Research the equipment and technologies used for each method • Research the techniques used to operate of the equipment • Research which construction activities require surveying • Research what information should be recorded and how it should be recorded • Research systematic errors in surveying measurements.
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	You then need to: Produce an illustrated technical report that appraises the methods and technologies underpinning linear, levelling and angular measurement and surveys. Your report should include: - Consideration of all aspects of the methods and technologies underpinning linear, levelling and angular measurement and surveys, their relative benefits and drawbacks and the impact of systematic errors to enable you to reach an appropriate balanced and well thought out conclusion.
Checklist of evidence required	Evidence must include: An illustrated technical report based on the methods and techniques underpinning, linear, levelling and angular measurements surveys and an explanation of the systematic errors and how they can be minimised. The report should justify the relevancy of the instruments being used. Your report should include evidence of individual research conducted by the learner for example, photographs or notes and sketches made during an investigation of the equipment. These will be fully annotated and referenced appropriately to support the narrative of the evidence.
Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
6/A.D1	Evaluate the methods and technologies underpinning linear, levelling and angular measurement and surveys.
6/A.M1	Discuss the methods and technologies underpinning linear, levelling and angular measurement and surveys.
6/A.P2	Explain systematic errors in surveying measurements.
6/A.P1	Explain the methods and technologies underpinning linear, levelling and angular measurement surveys.
Sources of information to support you with this Assignment	Textbooks Irvine, W. & Maclellan F 2006. Surveying for Construction (5th edition) McGraw Hill, Uren J & Price WF 2010 Surveying for Engineers (5th Edition) Palgrave Macmillan Bannister, Raymond & Baker 1998. Surveying (7th edition). Longman, Websites N/A Above are examples of websites. Further useful resources may be found at qualifications.pearson.com/en/support/published-



	resources.html
Other assessment materials attached to this Assignment Brief	N/A